





2008-02

# NPS Information Technology and Communications Services (ITACS) Technology News / February 2008

Monterey, California. Naval Postgraduate School

## NETWORK UPGRADE UPDATE

The proposals for the network upgrade exceeded the amount allowed; therefore, the project has been broken into three Contract Line Item Numbers (CLINs), which cover the Core Data Center, the Building Distribution Center and the Individual Distribution Center. Funding will cover an upgrade to core devices, building distribution centers and augmentation to the existing wireless under CLINs 1, 2, and 4. Edge devices, which will provide flexibility for intensive research and are covered under CLIN 3 have not been funded; however, efforts are underway to secure the funding for that upgrade.

## MULTI-FUNCTIONAL DEVICES

In addition to the savings in hardware, labor, and toner that the Dudley Knox Library has noted since multi-functional devices (MFD) were installed in the Dudley Knox Library, Ms. Judit Sedillos distributed a document to the IT Task Force members at their February 7, 2008 meeting detailing that copied sheets and printed sheets usage have decreased by 33,652 and 60,737, respectively, signifying an excellent return on investment from the new copier contract

## V-BRICK DEMONSTRATION

At the February 7, 2008 IT Task Force meeting, Mr. Jon Russell of the New Technology and Innovation Center demonstrated the new Video Brick (V-Brick system) that will be replacing the Webcast-in-a-Box as support for streaming media. Streaming media was implemented at NPS in 2004, and since its launch, over 100 hours per week — including major events — have been streamed, seamlessly integrating in the existing video-tele-conferencing system. Lifecycle replacement, support concerns, codec limitations through NMCI, LDAP integration, scalability and partnerships with peer institutions have been the main reasons why the generation two of the streaming platform is being moved to the V-Brick system. V-Brick allows multiple formats, live TV to desktop, synergy with partners, LDAP, customizable portal/video management, better resolution, and simultaneous multiple bit rates. Streaming occurs directly from one or more of the ten VTC encoders and/or two mobile encoders, which have been added existing servers and portals. Special events can bypass the portals. The new enterprise is the Naval Postgraduate School Academic Video Webcast, or NAVCAST. The external link can be found at http://navcast.nps.edu and the internal/intranet link is: http://intranet.nps.edu/navcast. Discussions are underway with the cable provider to finalize the franchise agreement for two live TV channels.

In addition to shows for the Pentagon Channel and the UCTV Research Channel, the new V-Brick streaming system will be one more vehicle to increase the visibility and improve communications throughout the campus.

Mr. Joe LoPiccolo and Mr. Jon Russell will be demonstrating the V-Brick system to the Faculty Council in March 2008.

Because of the efforts of the Network Operations Center, the New Technology and Innovation Center, Mr. Harry Thomas and Mr. Tracy Hammond, who worked with the faculty to secure the funding for implementing the new Video Brick (V-Brick) system, the system is expected to be launched on March 31, 2008. An announcement to faculty will be sent on March 1 and to students on March 15, 2008. The old portal will remain for approximately six months after the V-Brick systems goes live.

## HIGH-PERFORMANCE COMPUTING (HPC)

On February 11, 2008, Dr. Gabriele Jost joined the HPC staff by way of the DoD "High Performance Computing and Modernization Program" and the University of Texas Advanced Computing Center. Dr. Jost has a Ph.D. in Applied Mathematics, and is in expert in parallel computer programming, having written a book on the subject. Dr. Jost will be providing specialized programming support to researchers who are using high performance computing resources. Her office is in SP-337A, adjacent to Dr. Jeff Haferman.

A new 256-processor cluster is being purchased by Dr. Tom Christian and Dr. Young Shin of MAE, and will be supported by the HPC team. HPC staff have also been helping the Oceanography Dept to migrate many terabytes of data from very old technology to newer Apple XRaid storage systems, and to assist Oceanography and Meteorology in moving their webserver from the .mil domain to the .edu domain.

HPC staff moved a 32-processor IBM computer from Spanagel Hall to Ingersoll Hall, where they will reinstall the system software and generate operational capabilities on the machine.

A "HPC Wiki" is being created to provide HPC training materials to its customers.

## PARTNERSHIPS AND OUTREACH

**Dr. Christine Cermak, Mr. Joe LoPiccolo and Ms. Terri Brutzman** visited San Diego State University on Monday, February 11, 2008, to learn more about their connectivity and infrastructure support for Homeland Security collaboration with CalIT2.

**Mr. Bill Voss**, President of Sun Microsystems' Federal Division, visited NPS in early February. Included in the visit was a presentation by **Dr. Jeff Haferman** of the High-Performance Computing (HPC) Center, and a discussion about possible collaborative projects between Sun and NPS HPC. A site visit to Sun Microsystems in Menlo Park is being planned. Anyone who is interested in participating in the visit should contact Dr. Cermak.
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Representatives from Jeskell Systems visited NPS on February 29 to present the latest high-performance computer offerings from IBM.

## REPORT FROM THE TECHNOLOGY ASSISTANCE CENTER

From February 1 through February 29, the Technology Assistance Center (TAC) received 1,653 requests for assistance, 1,324 of which were resolved by the Tier 1/Tier 2 areas. The remaining 329 requests for assistance were resolved by other groups within ITACS. Requests for assistance were categorized as follows:

- Phone: 827
- Walk-in: 456
- Email: 267
- Web: 103

92% of all requests were resolved within the Service Level Agreements (SLA).

TAC staff also spent a great deal of time helping to erase the virus, BifRose, on approximately 100 users' computers, which not only required completely wiping and re-imaging each user's computer, but also pick-up and delivery of both the freshly imaged computers and all "loaners."